TITLE 329 SOLID WASTE MANAGEMENT BOARD

Proposed Rule with IDEM's Suggested Changes LSA Document #06-182

Amends 329 IAC 9 concerning additional measures to protect ground water from leaking underground storage tanks. Effective 30 days after filing with the publisher.

HISTORY

Finding and Determination of the Commissioner pursuant to IC 13-14-9-7 and Second Notice of Comment Period: July 1, 2006, Indiana Register (29 IR 3439).

Notice of First Hearing: July 1, 2006, Indiana Register (29 IR 3443).

Date of First Hearing: September 19, 2006.

Proposed Rule Published: November 15, 2006 (DIN:20061115-IR329060182PRA). Notice of Second Hearing: November 15, 2006 (DIN:20061115-IR329060182PHA).

Date of Second Hearing: November 21, 2006, continued to January 16, 2007.

SECTION 1. 329 IAC 9-1-18.5 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-18.5 "Existing" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2

Affected: IC 13-18-17-6; IC 13-23-3

Sec. 18.5. "Existing" means that a:

- (1) tank;
- (2) piping;
- (3) motor fuel dispensing system;
- (4) facility;
- (5) community public water supply system (CPWSS); or
- (6) potable drinking water well;

is in place prior to beginning the installation or replacement of a tank, piping, or motor fuel dispensing system. The term includes a potable drinking water well that the UST owner has or will install at a new underground storage tank facility regardless of whether the well is installed before or after the tanks, piping, and motor fuel dispenser systems. (Solid Waste Management Board; 329 IAC 9-1-18.5)

SECTION 2. 329 IAC 9-1-27.5 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-27.5 "Interstitial monitoring" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2 Affected: IC 13-18-17-6; IC 13-23-3

Sec. 27.5. "Interstitial monitoring" means a release detection method that continuously monitors the interstitial space of an underground storage tank and piping. The term includes only those release detection systems that are capable of detecting a breach in the primary containment of the underground storage tank and piping component being monitored before the regulated substance or petroleum stored is released to the environment. (Solid Waste Management Board; 329 IAC 9-1-27.5)

SECTION 3. 329 IAC 9-1-27.6 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-27.6 "Interstitial space" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2

Affected: IC 13-18-17-6; IC 13-23-3

Sec. 27.6. "Interstitial space" means the space between the primary and secondary containment systems. (Solid Waste Management Board; 329 IAC 9-1-27.6)

SECTION 4. 329 IAC 9-1-27.8 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-27.8 "Karst terrains" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2

Affected: IC 13-18-17-6; IC 13-23-3

Sec. 27.8. "Karst terrains" means an area where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present to karst terrains include any of the following:

- (1) Sinkholes.
- (2) Sinking streams.
- (3) Caves.
- (4) Large springs.
- (5) Blind valleys.
- (6) Grikes.
- (7) Karren.
- (8) Solution widened joints or bedding planes.
- (9) Loss of drilling fluid during core drilling.
- (10) Anasotmosis, and conduits of less than one (1) meter, but more than two and five-tenths (2.5) millimeters.
- (11) Karst aquifer.

(Solid Waste Management Board; 329 IAC 9-1-27.8)

SECTION 5. 329 IAC 9-1-37 IS AMENDED TO READ AS FOLLOWS:

329 IAC 9-1-37 "Pipe" or "piping" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2 Affected: IC 13-18-17-6; IC 13-23-3

Sec. 37. (a) "Pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthern materials that routinely contains and conveys regulated substances from the tank or tanks to the dispenser or other end-use equipment.

(b) The term does not include vent, vapor recovery, or fill lines that do not routinely contain regulated substances. (Solid Waste Management Board; 329 IAC 9-1-37; filed Dec 1, 1992, 5:00 p.m.: 16 IR 1067; readopted filed Jan 10, 2001, 3:25 p.m.: 24 IR 1535)

SECTION 6. 329 IAC 9-1-40.5 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-40.5 "Replaced" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2 Affected: IC 13-18-17-6; IC 13-23-3

Sec. 40.5. "Replaced" means the permanent removal from service and the new installation of any of the following:

- (1) An underground storage tank.
- (2) More than fifty percent (50%) of the length of any underground piping between the tank and the dispenser or other end-use equipment at any one (1) time.

(3) A motor fuel dispenser system and the equipment necessary to connect the dispenser to the underground storage tank system. For purposes of this definition, this equipment <u>may includes</u> flexible connectors, risers, or other transitional components that are beneath the dispenser and connect the dispenser to the piping.

(Solid Waste Management Board; 329 IAC 9-1-40.5)

SECTION 7. 329 IAC 9-1-41.8 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-41.8 "Secondary containment" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2

Affected: IC 13-18-17-6; IC 13-23-3

Sec. 41.8. "Secondary containment" means a release detection system that meets the requirements of 329 IAC 9-7-4(7), but does not include an under-dispenser spill containment system. (Solid Waste Management Board; 329 IAC 9-1-41.8)

SECTION 8. 329 IAC 9-1-45.5 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-1-45.5 "Under-dispenser spill containment" defined

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2

Affected: IC 13-18-17-6; IC 13-23-3

- Sec. 45.5. (a) "Under-dispenser spill containment" means a device that is capable of preventing an unauthorized release from under the dispenser from entering the soil or ground water or both.
 - (b) Such containment must:
 - (1) not allow liquid to penetrate on any side, bottom, and penetrations;
 - (2) be compatible with the substance conveyed by the piping; and
 - (3) allow for visual inspection and access to the components in the under-dispenser spill containment system.

(Solid Waste Management Board; 329 IAC 9-1-45.5)

SECTION 9. 329 IAC 9-2-1.2 IS ADDED TO READ AS FOLLOWS:

329 IAC 9-2-1.2 New or replaced UST systems within 1,000 feet of a community public water supply system or potable drinking water well

Authority: IC 13-14-8-1; IC 13-14-8-2; IC 13-23-1-1; IC 13-23-1-2

Affected: IC 13-11-2-241; IC 13-18-17-6; IC 13-23-3

Sec. 1.2. (a) This section applies to the following:

- (1) A new or replaced UST system that is installed within one thousand (1,000) feet of any existing community public water supply system (CPWSS) as defined in rules of the water pollution control board at 327 IAC 8-4.1-1(5) or any existing potable drinking water well.
- (2) Piping using a suction system for product delivery under 329 IAC 9-7-2(2)(B).
- (3) (2) Tanks used for emergency power generation that are deferred from release detection under 329 IAC 9-1-1(d).
- (b) A new or replaced UST system that is installed within one thousand (1,000) feet of an existing CPWSS or any existing potable drinking water well must meet the following requirements:
 - (1) The underground storage tank must be a secondarily contained tank and meet the following conditions:
 - (A) An interstitial monitoring device that must be located in the interstitial space between the walls and is monitored continually.
 - (B) Was or will be installed, calibrated, operated, and maintained in accordance with the

manufacturer's instructions, including routine maintenance and service checks for operability and running conditions.

- (C) Is able to contain regulated substances released from the tank system until the regulated substances are detected and removed.
- (D) Is able to prevent the release or regulated substances to the environment at any time during the operational life of the underground storage tank system.
- (E) Meets the appropriate following standards:
 - (i) Underwriters Laboratory Standard 58, "Steel Underground Tanks for Flammable and Combustible Liquids", 1986, Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, Illinois 60062.
 - (ii) Underwriters Laboratory Standard 1316, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures", 1994, Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, Illinois 60062.
 - (iii) Steel Tank Institute Standard F841-01, "Standard for Dual Wall Underground Steel Storage Tanks", 2001, 570 Oakwood Road, Lake Zurich, IL 60047.
- (2) Piping installation must be secondarily contained piping and meet the following conditions:
 - (A) An interstitial monitoring device that must be located in the interstitial space between the walls and meet the following as appropriate:
 - (i) The interstitial space is under a vacuum or pressure.
 - (ii) The interstitial space is liquid-filled.
 - (iii) The interstitial space is monitored continually.
 - (B) Was or will be installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability and running conditions.
 - (C) Monitoring devices between the inner and outer barriers of the tanks and piping that can detect a leak or release of product from the primary barrier.
 - (D) Meets the standard Underwriters Laboratory Standard 971, "Nonmetallic Underground Piping for Flammable Liquids", 1986, Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, Illinois 60062.
 - (E) Is either of the following:
 - (i) One hundred percent (100%) secondarily contained.
 - (ii) Secondarily contained piping with single-walled piping ends that terminate in tank and dispenser sumps.
- (c) In the case of a new underground storage tank system consisting of one (1) or more underground storage tanks and connected by piping, subsection (b) applies to all underground storage tanks and connected pipes comprising the underground storage tank system.
- (d) In the case of a replaced UST system or replaced existing piping connected to the underground storage tank, subsection (b) applies only to the specific underground storage tank or piping being replaced and not to other underground storage tanks and connected pipes comprising the underground storage tank system including a manifolded underground storage tank system and multiple piping runs connected to a single underground storage tank.
- (e) Each installation of a new motor fuel dispenser system must include under-dispenser spill containment if the new dispenser is within one thousand (1,000) feet of any existing CPWSS or any existing potable drinking water well. A motor fuel dispenser is considered new when:
 - (1) a dispenser is installed at a location where there previously was no dispenser; or
 - (2) an existing dispenser is removed and replaced with another dispenser and the equipment used to connect the dispenser to the under ground storage tank system is replaced.
- (f) Any owner or operator of a new or replaced tank, piping, or motor fuel dispenser system not meeting the requirements of this section after February 8, 2007, must demonstrate that the tank, piping, or motor fuel dispenser system are not within one thousand (1,000) feet of a CPWSS or <u>public potable</u> drinking water well.
- (g) For purposes of this section, "potable drinking water well" means any dug, driven, drilled, or bored hole that extends into the earth until it meets a water-bearing formation, such as an aquifer, consisting

solely of ground water or ground water under the direct influence of surface water that provides water deemed suitable for people to drink in its ambient state or after treatment as approved by the state. Such wells may be either privately or publicly owned and may provide water to a single-family residence, a group of residences, or a community.

(h) For purposes of this section, underground storage tank as defined under IC 13-11-2-241 does not include tank combinations or more than a single underground pipe connection to a tank. (Solid Waste Management Board; 329 IAC 9-2-1.2)

SECTION 10. THE FOLLOWING ARE REPEALED: 329 IAC 9-1-27.4; 329 IAC 9-2-1.1.